

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 2, 3, 4, 6, 7 and 12 as shown below. Please add new claims 13-16. The following listing of claims will replace all prior versions, and listings, of claims in the application:

Complete Listing of Claims:

1. (Currently Amended) A method for applying a coating to ~~an item~~ a copper or copper alloy item, the coating consisting in major part of a combination of zinc and chromium, characterized by exposing the item to an aqueous solution comprising effective amounts of hydroxyl ions (OH^-), Zn-containing ions, and Cr-containing ions and of rubidium ions (Rb^+) in major part valence balancing the OH^- .
2. (Currently Amended) ~~The method of claim 1~~ A method for applying a coating to an item, the coating consisting in major part of a combination of zinc and chromium, characterized by exposing the item to an aqueous solution comprising effective amounts of hydroxyl ions (OH^-), Zn-containing ions, and Cr-containing ions and of rubidium ions (Rb^+) in major part valence balancing the OH^- , wherein [:] the amount of Rb^+ is in excess of combined amounts of Na^+ and K^+ in the solution; and the Cr-containing ions are present in major part as Cr(VI) ions.
3. (Currently Amended) The method of claim [1] 2 wherein:
the amount of Rb is in excess of combined amounts of other alkali metals in the solution.
4. (Currently Amended) The method of claim [1] 2 wherein the solution has a pH of at most 13.0.
5. (Original) The method of claim 4 wherein the solution has a pH of between 11.0 and 13.0.

6. (Currently Amended) A method for coating an item characterized by:
- exposing the item to an aqueous solution comprising effective amounts of:
 - hydroxyl ions (OH^-);
 - one or more ions of alkali metals, alkaline earth metals, or a combination thereof other than Na, to in major part valence balance the OH^- ;
 - Zn-containing ions; and
 - Cr-containing ions; and
 - applying a current ~~to the~~ through the item effective to plate exposed portions of the item with a coating consisting in major part of a combination of Zn and Cr codeposited with a flake-like morphology.
7. (Currently Amended) A coated item manufactured by the method of claim [1] 6.
8. (Original) A method for treating a metallic surface comprising:
- exposing the surface to an aqueous solution comprising effective amounts of Rb^+ , hydroxyl ions (OH^-), Zn-containing ions and Cr-containing ions;
 - running a current through the surface so as to plate the surface with a coating consisting in major part of a combination of zinc and chromium.
9. (Original) The method of claim 8 wherein:
- a step of providing the solution comprises introducing the Rb^+ in the solution as RbOH ;
 - the amount of Rb^+ is in excess of combined amounts of Na^+ and K^+ in the solution;
 - and
 - the Cr in the Cr⁻-containing ions is present in major part as Cr(VI) ions.

10. (Original) An aqueous electroplating solution for the codeposition of zinc and chromium comprising effective amounts of:

hydroxyl ions (OH^-);

one or more ions of alkali metals, alkaline earth metals, or a combination thereof other than Na and K, to in major part valence balance the OH^- ;

Zn-containing ions; and

Cr-containing ions.

11. (Original) The solution of claim 10 consisting essentially of a solution of:

5-1300 g/l RbOH ;

0.1-125 g/l ZnO ; and

0.1-50 g/l $\text{Na}_2\text{Cr}_2\text{O}_7 \cdot 2\text{H}_2\text{O}$.

12. (Currently Amended) The solution of claim 11 further comprising an amount of ammonium hexafluorosilicate effective to stabilize the solution so as to substantially prevent zinc hydroxide precipitation over a period of ~~at least 3 days~~ about 4 days.

13. (New) The method of claim 1, wherein the amount of Rb^+ is in excess of combined amounts of Na^+ and K^+ in the solution; and the Cr-containing ions are present in major part as Cr(VI) ions.

14. (New) The method of claim 1 wherein:

the amount of Rb is in excess of combined amounts of other alkali metals in the solution.

15. (New) The method of claim 1 wherein the solution has a pH of at most 13.0.

16. (New) The method of claim 15 wherein the solution has a pH of between 11.0 and 13.0.